on STN

ACCESSION NUMBER: 1999163820 EMBASE

TITLE: Photodynamic diagnosis and treatment for atherosclerosis by an endoscopic approach.

AUTHOR: Hayashi J.; Saito T.; Aizawa K.

CORPORATE SOURCE: J. Hayashi, Department Medicine and Gerontology, School of Medicine, Kyorin University, Shinkawa 6-20-2, Mitakashi, Tokyo 181, Japan

SOURCE: Diagnostic and Therapeutic Endoscopy, (1999) 5/3 (191-195).

Refs: 9

ISSN: 1070-3608 CODEN: DTENER

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 006 Internal Medicine
014 Radiology
018 Cardiovascular Diseases and Cardiovascular Surgery
027 Biophysics, Bioengineering and Medical Instrumentation
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

AB . . . the carotid artery were recognized as reddish spots from outside the artery. In addition, we visualized specifically at the beating **heart** surface small coronary atherosclerosis using an epifluorescence stereoscope system. We examined the effects of photodynamic treatment with NPe6 on the. . .

RN (aspartylchlorin e6) **110230-98-3**

AB The photosensitizer, mono-L-aspartyl chlorin e6 (NPe6), specifically accumulates in the atheromatous plaque. We detected the fluorescence spectra of NPe6 emitted from atheromatous plaques on the descending thoracic aorta by an angioscopic approach using the animal model of atherosclerosis. We also showed that a fluorescence spectrum peak at 675 nm, was obtained laparoscopically only in parts of the abdominal aorta with an atheromatous plaque. By a fluorescence endoscope, atheromatous plaques on the carotid artery were recognized as reddish spots from outside the artery. In addition, we visualized specifically at the beating **heart** surface small coronary atherosclerosis using an epifluorescence stereoscope system. We examined the effects of photodynamic treatment with NPe6 on the atheromatous plaque. The change in the elastic framework in the atheromatous plaque after photodynamic treatment was evaluated using scanning electron microscopy. The destruction of the architecture of the elastic fiber network in the atheromatous plaque was revealed. We also studied the change in the lipid components of the atheromatous plaque using Fourier transform infrared (FTIR) microspectroscopy. FTIR microspectroscopic analysis showed a dissociation of ester bonds of cholesterol esters in the atheromatous plaque after photodynamic treatment. The framework of the atheromatous plaque and the lipids accumulated in the plaque could be destroyed following such treatment.

FILE 'REGISTRY' ENTERED AT 15:23:55 ON 07 SEP 2004

L1 1 S 110230-98-3/RN

FILE 'CAPLUS, EMBASE, BIOSIS, USPATFULL' ENTERED AT 15:24:21 ON 07 SEP 2004

L2 206 S L1

L3 3 S L2 AND ANGIOPLAS?

L4 6 S L2 AND (HEART OR CARDIO?)

L5 34985 S PCTA OR (PERCUTANEOUS TRANSLUMINAL)

L6 2 S L2 AND L5

L7 6 S L4 NOT L6

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:583727 CAPLUS
DOCUMENT NUMBER: 123:78621
TITLE: **Percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6
AUTHOR(S): Hayashi, Junichi; Sato, Hideaki; Saito, Takashi; Kuroiwa, Yukari; Aizawa, Katsuo; Fujiwara, Tatsushi; Hosoda, Yasuhiro
CORPORATE SOURCE: School Medicine, Kyorin University, Mitakashi, 181, Japan
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1995), 2371, 554-7
CODEN: PSISDG; ISSN: 0277-786X
DOCUMENT TYPE: Journal
LANGUAGE: English
TI **Percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6
IT Laser radiation
Photosensitizers
(**percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6 and laser radiation)
IT Antiarteriosclerotics
(antiatherosclerotics, photosensitizing; **percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6 and laser radiation)
IT Phototherapy
(chemo-, **percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6 and laser radiation)
IT Photodynamic action
(therapeutic, **percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6 and laser radiation)
IT **110230-98-3**, Mono-L-aspartylchlorin e6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6 and laser radiation)
AB Structural changes after photodynamic therapy of atherosclerotic lesions of the thoracic aorta were analyzed by SEM. Cholesterol fed atherosclerotic rabbits were injected i.v. with 5 mg/kg of NPe6. At 6 h after NPe6 loading, a diode laser irradiated angioscopically on the surface of atheroma with the total energy of 200 mJ/cm2. SEM showed degeneration of atherosclerotic plaques of the thoracic aorta examd. at one week after photodynamic therapy. NPe6 could be a potent photosensitizer for photodynamic therapy of atheroma.

ACCESSION NUMBER: 2000:725466 CAPLUS
DOCUMENT NUMBER: 133:291111
TITLE: Inhibitors for vascular reconstriction after **angioplasty**
INVENTOR(S): Nagae, Tsuneyuki; Aizawa, Katsuo
PATENT ASSIGNEE(S): Meiji Seika, Kaisha, Ltd., Japan
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059505	A1	20001012	WO 2000-JP2156	20000403
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1166784	A1	20020102	EP 2000-913083	20000403
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:

ACCESSION NUMBER:	1995:583727 CAPLUS
DOCUMENT NUMBER:	123:78621
TITLE:	**Percutaneous transluminal** photodynamic therapy of atheroma using mono-L-aspartylchlorin e6
AUTHOR(S):	Hayashi, Junichi; Sato, Hideaki; Saito, Takashi; Kuroiwa, Yukari; Aizawa, Katsuo; Fujiwara, Tatsushi; Hosoda, Yasuhiro
CORPORATE SOURCE:	School Medicine, Kyorin University, Mitakashi, 181, Japan
SOURCE:	Proceedings of SPIE-The International Society for Optical Engineering (1995), 2371, 554-7 CODEN: PSISDG; ISSN: 0277-786X
DOCUMENT TYPE:	Journal
LANGUAGE:	English